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## Double exchange between chromium ions in the KZnF<sub>3</sub>:Cr<sup>3+</sup>,Cr<sup>2+</sup> crystal

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### Abstract

In the optical spectrum of the KZnF<sub>3</sub> crystal doped with chromium ions, the absorption lines of Cr<sup>2+</sup>-Cr<sup>3+</sup> ion pairs with dynamic electron transfer between chromium ions via the intermediate fluorine ion (double 180 degree exchange) are observed. The value of the transfer integral for the e g-electron was directly measured for the first time using the temperature dependence of the integral intensity of the absorption lines.

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